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AUTHOR Edwards, Carolyn Pope
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ABSTRACT

Waldorf, Montessori, and Reggio Emilia are three progressive approaches to early childhood education that appear to be growing in influence in North America and to have many points in common. This article provides a brief comparative introduction of these models and highlights several key areas of similarity and contrast. All three approaches represent an explicit idealism and turn away from war and violence toward peace and reconstruction. They are built on coherent visions of how to improve human society by helping children realize their full potential as intelligent, creative, whole persons. In each approach, children are viewed as active authors of their own development, strongly influenced by natural, dynamic, self-righting forces within themselves, opening the way toward growth and learning. Teachers depend on carefully prepared, aesthetically pleasing environments that serve as a pedagogical tool and provide strong messages about the curriculum and about respect for children. Partnering with parents is highly valued in all three approaches, and children are evaluated by means other than traditional tests and grades. However, there are also many areas of difference, some at the level of principle and others at the level of strategy. Underlying the three approaches are variant views of the nature of young children's needs, interests, and modes of learning that lead to contrasts in the ways that teachers interact with children in the classroom, frame and structure learning experiences for children, and follow the children through observation/documentation. The article concludes with a discussion of the methods that researchers apply to analyze the strengths and weaknesses of each approach. (Contains 43 references.) (Author/HTH)

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Carolyn Pope Edwards
University of Nebraska at Lincoln

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Abstract

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Waldorf, Montessori, and Reggio Emilia are three progressive approaches to early childhood education that appear to be growing in influence in North America and to have many points in common. This article provides a brief comparative introduction and highlights several key areas of similarity and contrast. All three approaches represent an explicit idealism and turn away from war and violence toward peace and reconstruction. They are built on coherent visions of how to improve human society by helping children realize their full potential as intelligent, creative, whole persons. In each approach, children are viewed as active authors of their own development, strongly influenced by natural, dynamic, self-righting forces within themselves, opening the way toward growth and learning. Teachers depend for their work with children on carefully prepared, aesthetically pleasing environments that serve as a pedagogical tool and provide strong messages about the curriculum and about respect for children. Partnering with parents is highly valued in all three approaches, and children are evaluated by means other than traditional tests and grades. However, there are also many areas of difference, some at the level of principle and others at the level of strategy. Underlying the three approaches are variant views of the nature of young children's needs, interests, and modes of learning that lead to contrasts in the ways that teachers interact with children in the classroom, frame and structure learning experiences for children, and follow the children through observation/documentation. The article ends with discussion of the methods that researchers apply to analyze the strengths and weaknesses of each approach.

Introduction

Europe has been a rich source of many influential educational ideas. In elementary and early childhood education, three of the best-known approaches with European origins are Waldorf, Montessori, and Reggio Emilia. All three are seen as strong educational alternatives to traditional education and as sources of inspiration for progressive educational reform. Contemporary interest in these approaches leads the public and the professional community to ask many questions about their parallels and contrasts. Many observers have noticed common themes and elements in their views of children and their development. What exactly are their respective historical origins and foundational

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philosophical premises and concepts about child development and learning? How do they compare with respect to organizational structures for decision making and school environments, curriculum, instructional methods, observation/assessment, and teacher preparation—the elements of curriculum models (Goffin, 2000)?

This article provides an overview and comparison of the three approaches, to introduce them to readers and highlight key points of similarity and difference. Of course, in actuality, great variation can be expected to exist in how any educational model or approach plays out in application. Schools and classrooms do not necessarily look alike just because they derive from the same philosophy, and this article can at most describe only the general tendencies that may not correctly describe particular schools or programs. To understand a specific institution, one must observe its environments and teacher-child interactions, read its documents, interview staff, and talk to past and present parents and children. Because this article addresses the general level, it speaks primarily to underlying goals and principles—"best practice" from three points of view—and provides resources pointing the reader toward additional information.

History

All three approaches represent an explicit idealism and turn away from violence, toward peace and reconstruction. They are built on coherent visions of how to improve human society by helping children realize their full potential as intelligent, creative, whole persons. School communities struggle continually to keep their guiding principles alive in current, meaningful ways and not to let them degrade into slogans.

Waldorf education was founded by Rudolf Steiner (1861-1925), a maverick Austrian scientist and philosophical thinker. His interests intersected spiritual and scientific planes: he wanted to integrate these two forms of understanding and experience, and he founded "Anthroposophy" ("knowledge of the true nature of the human being" [Kotzsch, 1990]). In 1919, in the wake of the devastation of World War I, Steiner was invited by Emil Mott to found a school for the employees of the Waldorf-Astoria cigarette factory in Stuttgart, Germany. The vision was that this new kind of school would educate human beings able to create a just and peaceful society. It defied the conventions of the time in being coeducational (bringing boys and girls together in the classroom), open to children of any background (without entrance examination), comprehensive (from preschool level through high school), and independent of external control (a self-governing administrative unit). Today, Waldorf education continues to be a well-defined model with every school administratively independent (Barnes, 1991; Oppenheimer, 1999). There are now more than 800 Waldorf schools in over 40 countries, with 140 schools affiliated with the Association of Waldorf Schools of North America (AWSNA). Bob Lathe and Nancy Parsons (<http://www.bobnancy.com/>) maintain a list of Waldorf schools affiliated with AWSNA, and about 40 charter schools, parent-initiative schools, and other schools not affiliated but philosophically close to AWSNA. The Web sites <http://www.awsna.org> and <http://www.waldorflibrary.org> contain information about philosophy, publication resources, and alumni. There are 10 Steiner teacher-training institutes in the United States and 2 in Canada (see <http://www.bobnancy.com/>).

Maria Montessori (1870-1952) was the brilliant figure who was Italy's first woman physician. After innovating a methodology for working with children with disabilities, she

started her Casa dei Bambini (Children's House) in 1907 for children ages 4 through 7 in a housing project in the slums of Rome. Her movement spread to other countries, especially after the Fascist regime denounced Montessori methods of education and she left Italy. In the United States, there was strong but brief interest from 1910 to 1920, but then Montessori education fell out of favor (Torrence & Chattin-McNichols, 2000). During this time, however, the movement flourished in Europe and India. In the 1950s, American educator Nancy Rambush led a movement of renewal, and Montessori education spread as an independent school movement (Loeffler, 1992). There are probably 5,000 or more schools calling themselves "Montessori" in the United States (Ruenzel, 1997). Of these, about 20% are affiliated with the two major accrediting organizations. Association Montessori Internationale (AMI) (<http://www.montessori-ami.org/ami.htm>) promotes the study, application, and propagation of Montessori's (original) ideas and principles for education and human development. The American Montessori Society (AMS) (<http://www.amshq.org>) supports Montessori education in the context of contemporary American culture (Loeffler, 1992). The Web sites provide information about program history, philosophy, accreditation, teacher training, and published resources. The AMI Web site provides a map that gives a good picture of the Montessori movement worldwide. The AMS Web site provides information about their teacher research network and a set of position papers on such topics as learning and assessment, inclusion, infant programs, math and music education, multiage grouping, and holistic peace education. There are many Montessori teacher-training programs, over 50 of which are affiliated with AMS and 15 with AMI (see the Web site of the North American Montessori Teachers' Association at <http://www.montessori-namta.org>). In the 1960s, furthermore, American parents began to advocate for Montessori education in public schools, leading to hundreds of Montessori programs (often magnet programs) at the preschool and elementary levels, and now increasingly at the middle and high school levels (Chattin-McNichols, 1992b). All of the major Montessori organizations in the United States have endorsed a position paper on "Essential Elements of Successful Public Montessori Schools" (<http://www.amshq.org/schls/publicintro.html>). Montessori education at the infant-toddler level is also growing rapidly.

Reggio Emilia is a city in northern Italy where educators, parents, and children began working together after World War II to reconstruct society and build an exemplary system of municipal preschools and infant-toddler centers (New, 1993). Under leadership of the visionary founding director, Loris Malaguzzi (1920-1994), the system evolved from a parent cooperative movement into a city-run system that exercises a leadership role in Italy and throughout Europe, and now increasingly in Asia, Australia, North America, and other parts of the world (New, 2000). The Reggio Institute in Stockholm, Sweden, is known as a source of innovation and reflection (Dahlberg, Moss, & Pence, 1999). Programs in Reggio are family centered and serve children at infant-toddler and preschool levels (Edwards, Gandini, & Forman, 1998; Gandini & Edwards, 2001), with first priority given to children with disabilities or social service needs. Reggio Emilia is not a formal model like Waldorf and Montessori, with defined methods, teacher certification standards, and accreditation processes. Instead, educators in Reggio Emilia speak of their evolving "experience" and see themselves as a provocation and reference point, a way of engaging in dialogue starting from a strong and rich vision of the child (Edwards, Gandini, & Forman, 1998; Katz & Cesarone, 1994; New, 2000). Reggio Children/USA is the North American arm of Reggio Children S.r.l., the Italian organization set up in 1994 to protect and enrich the educational theory and practice accumulated in the Reggio Emilia municipal infant/toddler and preschool centers. The ERIC/EECE Web site has an extensive Reggio link

(<http://ericcece.org/reggio.html>), presenting information about Reggio Children/USA and a list of self-nominated schools in North America with programs based on or inspired by the approach used in Reggio Emilia. The Merrill-Palmer Institute of Wayne State University maintains the Web site of Reggio Resources, publishes the periodical *Innovations in Early Education: The International Reggio Exchange*, and updates study tour, conference, and contact information (<http://www.mpi.wayne.edu/>).

Child Development Theory and Curriculum

All three approaches view children as active authors of their own development, strongly influenced by natural, dynamic, self-righting forces within themselves, opening the way toward growth and learning.

Rudolf Steiner believed in a unity of spirit, soul, and body, and that good education restores the balance between thinking, willing, and feeling (Steiner, 1995). His theory of child development elaborated three cycles of seven-year stages, each with its own distinctive needs for learning—an ascending spiral of knowledge. Before age 7, nursery and kindergarten children learn through *imitation* and doing (Schwartz, 1996). Imaginary play is considered the most important "work" of the young child and the activity through which the child grows physically, intellectually, and emotionally. The educational focus is on bodily exploration, constructive and creative play, and oral (never written) language, story, and song. On a given morning, children might do such things as sing songs, paint with watercolors, color with beeswax crayons, cook, hear a story told with puppets, go on a nature walk, work in the garden, build with wooden blocks, or make houses using play stands and cloth. Through these activities, they become deeply engaged and develop powers of concentration and motivation. A significant portion of the school morning is devoted to uninterrupted imaginary play. Recognition of the importance of "rhythm" and of balance of energetic and restful play leads teachers to follow a cyclical schedule of yearly, weekly, and daily activities, including festivals and foods. From 7 to 14 years, children stay with the same teacher and classroom group, and they become a very close-knit group as they explore the world through conscious *imagination* or "feeling intelligence" (Finser, 1995). The teacher presents a curriculum that has structure and sequence but that relies on lessons unaccompanied by textbooks. This approach fosters an integrated, multisensorial approach to learning and expression, with more emphasis on oral listening and memory than is found in other early childhood models for the primary years. For example, the teacher might introduce an arithmetical operation by telling a story where the numbers are characters in a drama or render the history of the Norman Conquest as an exciting tale. Children listen as the teacher presents the material, and they integrate what they have learned as they design and illustrate with care and beauty their own lesson books. In essence, they compose their own texts, which preserve for them what they have learned in their own personal format, documents and treasures of their learning experiences. Children study literature, folktales, and mythology; rhythmic musical movement (eurythmy); practical crafts; natural sciences; foreign languages; art; and music. Out of doors, they may construct play shelters with boards, branches, and other materials. During the high school years, the rational, abstract power of the *intellect* emerges, and adolescents focus on ethics, social responsibility, and mastery of complex and rigorous subject matter, with specialized teachers. Images of Waldorf education grades K-12 in four different schools can be found in the video "Waldorf Education: A Vision of Wholeness" (Hagens Recording Studio, 1996).

Maria Montessori's approach reflects a theoretical kinship with the European progressive educational philosophers Rousseau, Pestalozzi, Seguin, and Itard. She believed in children's natural intelligence, involving from the start rational, empirical, and spiritual aspects. She saw development as a series of six-year periods, like repeating triangular waves, each with its own particular sensitivities. A *constructivist*, she posited an active child, eager for knowledge and prepared to learn, seeking perfection through reality, play, and work. In Montessori education, children usually are grouped into multiage classrooms spanning three years, in order to promote adult-child continuity and close peer relationships. Birth to age 3 is the time of the "unconscious absorbent mind," whereas age 3 to 6 is the time of the "conscious absorbent mind" (Montessori & Chattin-McNichols, 1995). In both, the child seeks sensory input, regulation of movement, order, and freedom to choose activities and explore them deeply without interruption in a carefully prepared (serene and beautiful) environment that helps the child choose well (Greenwald, 1999). During the infant-toddler (birth to age 3) and primary (age 3 to 6) years, classrooms usually have more than one teacher. To introduce new curriculum, teachers present demonstration lessons at the point when an individual or small group indicates readiness to advance in the sequence of self-correcting materials, in the areas of practical life, sensorial, mathematics, language, science and geography, and art and music (Humphryes, 1998). Montessori designed famous materials still in use; photos of some of these can be found at <http://www.montessori-ami.org/ami.htm>. In addition, other classroom materials are created or put together by individual teachers or groups as they carefully consider their classroom observations. The Montessori curriculum is highly individualized but with scope and sequence and clearcut domains. The individualization results in some young children mastering reading and writing before age 6 following Montessori "writing to read" methods. Preschool children in full-day programs usually address the Montessori curriculum in the morning and typical child-care play including fantasy play in the afternoon. From age 6 to 12, children are expected to explore a wider world and develop rational problem solving, cooperative social relations, imagination and aesthetics, and complex cultural knowledge. From 12 to 18, children reconstruct themselves as social beings and are humanistic explorers, real-world problem solvers, and rational seekers of justice.

Loris Malaguzzi's thinking reflects a social constructivism drawing from Dewey, Piaget, Vygotsky, Bruner, and others. Focusing on the infant and preschool years only, Malaguzzi rejected Piaget's stage notions as too limiting. He drew a powerful image of the child, social from birth, full of intelligence, curiosity, and wonder. His vision of an "education based on relationships" focuses on each child in relation to others and seeks to activate and support children's reciprocal relationships with other children, family, teachers, society, and the environment (Malaguzzi, 1993). This resourceful child generates changes in the systems in which he or she is involved and becomes a "producer of culture, values, and rights" (Rinaldi, 2001a, p. 51). Teachers seek to hold before them this powerful image as they support children in exploring and investigating. Children grow in competence to symbolically represent ideas and feelings through any of their "hundreds of languages" (expressive, communicative, and cognitive)—words, movement, drawing, painting, building, sculpture, shadow play, collage, dramatic play, music, to name a few—that they systemically explore and combine. Teachers follow the children's interests and do not provide focused instruction in reading and writing; however, they foster emergent literacy as children record and manipulate their ideas and communicate with others. The curriculum has purposive progression but not scope and sequence. Teaching and learning

are negotiated, emergent processes between adults and children, involving generous time and in-depth revisiting and reviewing. Close, multiyear adult-child and peer relations are fostered, usually through a looping organization. Long-term, open-ended projects are important vehicles for collaborative work, in classroom environments carefully prepared to offer complexity, beauty, and a sense of well-being and ease. The Reggio Emilia approach was developed within and for the municipal child care and education programs serving children under 6 and therefore is not an elementary school approach. However, progressive educators in the United States have taken useful insights from Reggio Emilia into primary education (especially with respect to project work and observation/documentation). Visual images of the preschool environments in Reggio Emilia are presented in Patricia Tarr's (2001) online article (http://www.designshare.com/Research/Tarr/Aesthetic_Codes_1.htm) and in the slide set *Open Window* (Reggio Children S.r.l., n.d.). Images of environments and learning experiences at L'Atelier, a preschool in Miami, Florida, consulting with Reggio Emilia educators, can be found at <http://www.latelier.org> (link to Pictures).

Roles of the Teacher

The teachers in these approaches share in common the goals to be nurturers, partners, and guides to children. They depend on carefully prepared, aesthetically pleasing environments as a pedagogical tool, providing strong messages about the curriculum and respect for children. Partnering with parents is highly valued in all three approaches. However, their contrasting views of the nature of children and of learning lead them to act out differing roles in the classroom. Coulter (1991) presents an interesting argument that Montessori and Waldorf education are like "reverse symmetries," born out of their founders' responsive solutions to historical contexts presenting differing issues to children. Of course, in all three approaches, teacher roles with children change with age; adults are more nurturing with younger children.

The Waldorf teacher generally plays a *performance role* in the classroom as he or she leads or models many whole-group activities involving integration of the academic and the artistic with an explicit spirituality. The teacher is also a didactic moral leader, seeking to provide an intimate classroom atmosphere permeated with a sense of *harmony* and full of themes about caring for the community and for the natural and living worlds. The teacher needs a classroom in which children can bring together their thinking, feeling, and willing, no matter what their personalities and temperaments (Durach, 1998). Color and the use of natural materials and carefully chosen props (such as open-ended, handmade toys and dolls with minimal detail to encourage the imagination) are intrinsic to the uncluttered, warm and homelike, aesthetically pleasing Waldorf environments (Schwartz, 1996). Examples of Waldorf materials can be seen at the Web site <http://www.NaturalPlay.com/index.shtml>. Teachers seek to encourage the child's natural sense of wonder, belief in goodness, and love of beauty. They are more reticent at the early childhood levels of Waldorf and more directive and didactic in the elementary and secondary classrooms. In the kindergarten classroom, teachers seek to be subtle in their guidance, yet always aware of everything going on in the room (Schwartz, 1996).

The Montessori teacher plays the role of *unobtrusive* director in the classroom as children individually or in small groups engage in self-directed activity. Based on detailed, systematic observation of the children, the teacher seeks to provide an atmosphere of

productive calm as children smoothly move along in their learning, alternating between long periods of intense concentration interspersed with brief moments of recovery/reorganization (Oppenheimer, 1999). The teacher's goal is to help and encourage the children, allowing them to develop confidence and inner discipline so that there is less and less need to intervene as the child develops. Interrupting children when engaged in purposeful activity interferes with their momentum, interest, and inner workings of thought (Greenwald, 1999). During the early childhood years, the teacher brings the young child into close contact with reality through sensory investigation and practical activity and then relies on the child's unfolding inner program of curiosities and sensitivities to ensure that the child will learn what he or she needs. With the younger students at each level, the teacher is more active, demonstrating the use of materials and presenting activities based on an assessment of the child's requirements. Montessori classrooms provide carefully prepared, orderly, pleasing environments and materials where children are free to respond to their natural tendency to work individually or in small groups (see <http://www.montessori-namta.org> or the videotapes and slide sets for parent education from the North American Montessori Teachers' Association). Books, toys, and materials are carefully chosen to favor refined quality and natural materials. Books present images of the real world in a beautiful way, waiting to introduce fantasy until age 5 or 6 (consult catalogs at <http://www.michaelolaf.net>). The children progress at their own pace and rhythm, according to their individual capabilities. The school community as a whole, including the parents, work together to open the children to the integration of body, mind, emotions, and spirit that is the basis of holistic peace education (accepting and relating harmoniously with all human beings and the natural environment).

The Reggio teacher plays a role of *artful balancing* between engagement and attention (Edwards, 1998). Based on careful and sensitive listening, observation/documentation, and reflection with other adults, the teachers serve as resources and guides to the children (Rinaldi, 2001b). Classroom teachers work in pairs, and collaboration and mentoring between personnel throughout the system are strongly promoted. Additional teachers especially trained in the visual arts work with teachers and children to encourage expression through different media and symbol systems. Teachers organize environments rich in possibilities and provocations that invite the children to undertake extended exploration and problem solving, often in small groups, where cooperation and disputation mingle pleasurably. Teachers also act as recorders (documenters) for the children, helping them trace and revisit their words and actions and thereby making the learning visible (Project Zero & Reggio Children, Italy, 2001). They provide instruction in tool and material use as needed, help find materials and resources, and scaffold children's learning—sometimes entering "inside the group of children," sometimes remaining attentively "on the outside." (For a detailed and illustrated description of a "castle project," go to <http://child.etsu.edu/center/training/reggio/reggio.htm>.) The physical environment (the "amiable" school) receives much attention and supports exchange and relationships through physical qualities of transparency, reflectiveness, openness, harmony, softness, and light (Ceppi & Zini, 1998; Gandini, 1993). A classroom atmosphere of playfulness and *joy* pervades. The school and surrounding community welcome the children into their culture and toward democratic participation.

Assessment, Evaluation, and Research

In all three approaches, children are assessed by means other than traditional tests and

grades. Instead, parents receive extensive descriptive information about their children's daily life and progress and share in culminating productions or performances. Portfolios or other products of children's individual and group work may be displayed and sent home at key intervals and transitions. In Reggio Emilia and other cities in Italy (Gandini & Edwards, 2001), teachers prepare *diarios*, or memory books, to trace the experience of children under 3 through the infant-toddler years. Process research (formative evaluation) is central to program improvement and quality control in these approaches. A strong example is the Reggio Emilia strategy of *documentation* (Katz & Chard, 1996; Oken-Wright, 2001), a cooperative practice that helps teachers listen to and see the children with whom they work, thus guiding ongoing curriculum decisions and fostering teacher professional development through collaborative study and reflection (Gandini & Goldhaber, 2001). Documentation is also vital for systematically following and studying the ways that groups of children develop ideas, theories, and understandings (Project Zero & Reggio Children, Italy, 2001).

Child outcome research is not intrinsic to the way educators work in any of these three approaches. For Waldorf, testimonials of parents and graduates are gathered as examples and evidence of effectiveness (e.g., *Learning to Learn* from AWSNA, n.d.), and creativity also has been studied (Ogletree, 1996). Administrators in Reggio Emilia have used parent interviews and questionnaires to gather information about their programs (see Fontanesi, Gialdini, & Soncini, 1998). Findings from formal exit interviews with parents at the Model Early Learning Center in Washington, DC, are reported in Lewin (1998, pp. 354-356). However, Reggio and Reggio-inspired educators consider pedagogical documentation to be an instrument for "reflection and democracy" not assessment (Dahlberg, Moss, & Pence, 1999; Gandini & Goldhaber, 2001; Oken-Wright, 2001; Rinaldi, 2001b).

Yet as the three approaches increasingly interact with the world of public school education, dialogue is leading to greater focus on authentic and valid ways of conducting assessment and evaluation. The American Montessori Association issued a position paper on "Learning and Assessment" that recommends that assessment procedures in American classrooms move toward formats (such as portfolios, presentations, multimedia projects) that more authentically gauge children's ability to interrelate ideas, think critically, and use information meaningfully (<http://www.amshq.org>). Montessori education has been the most friendly of the three approaches to empirical research on child learning outcomes. Many studies have demonstrated the effectiveness of Montessori methods and provided insight into children's gains with respect to reading and literacy, mathematics, and motivation (e.g., Chattin-McNichols, 1992a; Loeffler, 1992; Miller & Bizzell, 1983; Takacs, 1993; Haines, 2000; see summary at <http://www.montessori-namta.org/generalinfo/rschsum.html>). The American Montessori Association sponsors a Teachers' Research Network to promote teacher reflection on classroom practice (<http://www.amshq.org>). Their activities include training teachers in working with research mentors, interpreting research, framing questions, using qualitative and quantitative methods, and conducting joint comparative studies between types of schools. The organization also sponsors an annual dissertation award to promote research on Montessori education.

The research community distinguishes between types of research based on the purposes for which it is conducted. The process research favored by educators in Reggio Emilia promotes reflective practice and program improvement through formative methods that

help educators to better understand the context of their problems, assess the needs and responses of their stakeholders, and analyze "what works and what does not" on an ongoing basis. However, although such research assists educators while programs are ongoing to refine and improve their work, it does not allow outside audiences to understand outcomes and measure impacts over time. While we have some research on Montessori education, some policy makers continue to ask for new studies of Waldorf and Reggio Emilia schools that would measure lasting child-related outcomes and evaluate program quality based on external criteria. As discussed above, educators in dialogue with Reggio Emilia strongly question the validity and usefulness of such research (Dahlberg, Moss, & Pence, 1999). Nevertheless, educational researchers today are much more sophisticated in designing studies involving a variety of qualitative and quantitative methods, including interviews, observations, focus groups, and surveys, as well as ethnographic and narrative techniques, in addition to appropriate and innovative testing and authentic child assessment. These methods could be used to study classrooms, children, and families in ways that would supply a new kind and level of information to validate the effectiveness of the approaches, analyze their specific and unique strengths and weaknesses, and explain how and why children often thrive in and parents support the three progressive educational approaches that we have described.

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Author Information

Carolyn Pope Edwards is a professor of psychology and family and consumer sciences at the University of Nebraska in Lincoln, where she teaches courses in developmental psychology and early childhood education. Her most recent research focuses on parents' cultural belief systems concerning young children's development. She has also conducted quantitative and qualitative research on children's social and moral

development and parent-child interaction in Mexico, Kenya, Haiti, Norway, Italy, and the United States. In 1983, she was visiting professor of psychology at the National Research Council in Rome, where she began studying early childhood education in Italy; and in 1988, she was a fellow at the Centre for Advanced Study in Oslo, Norway. She is author or editor of *Promoting Social and Moral Development of Young Children* (1986); *Children of Different Worlds: The Formation of Social Behavior* (1988); *The Hundred Languages of Children: The Reggio Emilia Approach to Early Childhood Education* (1993); *The Hundred Languages of Children*, 2nd Edition (1998); and *Bambini: The Italian Approach to Infant-Toddler Care* (2001).

Carolyn Pope Edwards
Department of Family and Consumer Sciences
University of Nebraska-Lincoln
Lincoln, NE 68583-0801
Email: cedwards1@unl.edu

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